

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2001-020900

(43)Date of publication of application : 23.01.2001

(51)Int.Cl.

F04F 5/10  
F02M 37/18

(21)Application number : 11-188093

(71)Applicant : AISAN IND CO LTD

(22)Date of filing : 01.07.1999

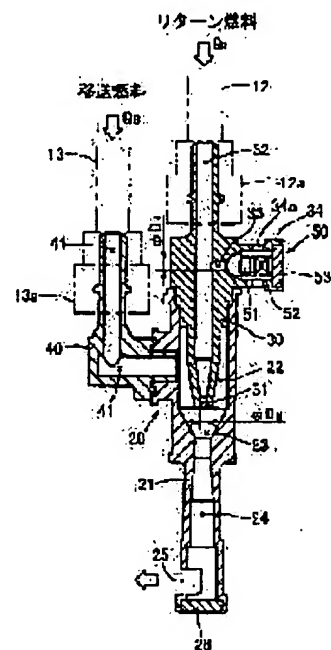
(72)Inventor : NAKAMURA TAKEHIDE  
TANABE YUICHI  
UEDA YOSHINORI

## (54) JET PUMP

## (57)Abstract:

**PROBLEM TO BE SOLVED:** To suppress a flow rate change of liquid, preventing a rise of back pressure by liquid by setting a relief restriction diameter of a relief port within a specified range in a jet pump provided with a relief valve for discharging liquid introduced into an introduction port through the relief port.

**SOLUTION:** This jet pump 20 discharges introduced liquid from a relief port 33 by a relief valve 50 when pressure within an introduction port 32 becomes a fixed value or more. In this case, when a nozzle restriction diameter of a nozzle 31, a relief restriction diameter of the relief port 33 and the total restriction diameters are fixed as  $\phi$ ;DN,  $\phi$ ;DR and  $\phi$ ;Dr, respectively, the relief restriction diameter  $\phi$ ;DR is set within a range of a value determined based on the nozzle restriction diameter  $\phi$ ;DN fixed according to flow rate performance and a minimum value of the total restriction diameter  $\phi$ ;Dr capable of discharging maximum flow rate of introduced liquid or more and a value that transfer fluid of prescribed flow rate can be transferred by introduced liquid of minimum flow rate in case of the relief valve 50 trouble in opening or below.



## LEGAL STATUS

[Date of request for examination] 15.01.2003

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the  
examiner's decision of rejection or application  
converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of  
rejection][Date of requesting appeal against examiner's decision  
of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office